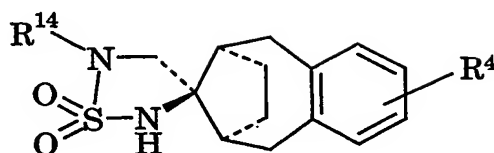


**CLAIMS**

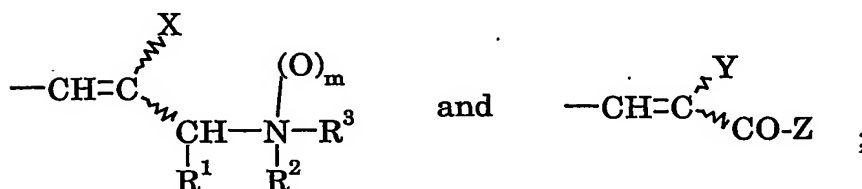
1. A compound of formula I:



I

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wherein R<sup>4</sup> is selected from:



X represents H, halogen, CN or methyl;

R<sup>1</sup> represents H or C<sub>1-4</sub>alkyl which is optionally substituted with OH or C<sub>1-4</sub>alkoxy; or R<sup>1</sup> and R<sup>2</sup> together complete a heterocyclic ring of 3-7 members bearing 0-2 substituents, in addition to R<sup>3</sup>, selected from halogen, oxo, NO<sub>2</sub>, CN, CF<sub>3</sub>, C<sub>1-6</sub>alkyl, C<sub>2-6</sub>acyl, C<sub>2-6</sub>alkenyl, C<sub>1-6</sub>alkoxy, C<sub>1-6</sub>alkoxycarbonyl and Ar;

when R<sup>1</sup> represents H or optionally substituted C<sub>1-4</sub>alkyl, R<sup>2</sup> and R<sup>3</sup> independently represent H, C<sub>1-10</sub>alkyl, C<sub>3-10</sub>cycloalkyl, C<sub>3-6</sub>cycloalkylC<sub>1-6</sub>alkyl, C<sub>2-10</sub>alkenyl, C<sub>2-10</sub>alkynyl, Ar, heterocyclyl, or heterocyclylC<sub>1-6</sub>alkyl, wherein the alkyl, cycloalkyl, alkenyl and alkynyl groups optionally bear one substituent selected from halogen, CF<sub>3</sub>, NO<sub>2</sub>, CN, Ar, ArCH<sub>2</sub>O, ArO, -OR<sup>11</sup>, -SR<sup>11</sup>, -SO<sub>2</sub>R<sup>12</sup>, -COR<sup>11</sup>, -CO<sub>2</sub>R<sup>11</sup>, -CON(R<sup>11</sup>)<sub>2</sub>, -OCOR<sup>12</sup>, -N(R<sup>11</sup>)<sub>2</sub> and -NR<sup>11</sup>COR<sup>12</sup>; and the heterocyclic groups optionally bear up to 3 substituents independently selected from halogen, NO<sub>2</sub>, CN, R<sup>12</sup>, Ar, ArCH<sub>2</sub>O, ArO, ArOCH<sub>2</sub>, -OR<sup>11</sup>, -SR<sup>11</sup>, -SO<sub>2</sub>R<sup>12</sup>, -COR<sup>11</sup>, -CO<sub>2</sub>R<sup>11</sup>, -CON(R<sup>11</sup>)<sub>2</sub>, -OCOR<sup>12</sup>, -N(R<sup>11</sup>)<sub>2</sub> and -NR<sup>11</sup>COR<sup>12</sup>;

or R<sup>2</sup> and R<sup>3</sup> together with the nitrogen to which they are mutually attached complete a mono- or bicyclic heterocyclic ring system of 5-10 ring

atoms selected from C, N, O and S, said ring system optionally having an additional benzene or heteroaryl ring fused thereto, said heterocyclic system and optional fused ring bearing 0-3 substituents independently selected from halogen, oxo, NO<sub>2</sub>, CN, R<sup>12</sup>, Ar, ArCH<sub>2</sub>O, ArO, ArOCH<sub>2</sub>,  
5 -OR<sup>11</sup>, -SR<sup>11</sup>, -SO<sub>2</sub>R<sup>12</sup>, -COR<sup>11</sup>, -CO<sub>2</sub>R<sup>11</sup>, -CON(R<sup>11</sup>)<sub>2</sub>, -OCOR<sup>12</sup>, -N(R<sup>11</sup>)<sub>2</sub> and -NR<sup>11</sup>COR<sup>12</sup>;

and when R<sup>1</sup> completes a ring with R<sup>2</sup>, R<sup>3</sup> represents H, C<sub>1-6</sub>alkyl, C<sub>2-6</sub>acyl, C<sub>2-6</sub>alkenyl or benzyl;

m is 0 or 1, with the proviso that when m is 1 neither R<sup>2</sup> nor R<sup>3</sup> is H  
10 and R<sup>3</sup> is not acyl, and that m is 1 when X and R<sup>1</sup> are both H;

R<sup>11</sup> represents H or R<sup>12</sup>;

R<sup>12</sup> represents C<sub>1-6</sub>alkyl which optionally bears up to 3 halogen substituents or one substituent selected from CN, OH, C<sub>1-4</sub>alkoxy and C<sub>1-4</sub>alkoxycarbonyl;

15 Y represents halogen, CN or methyl;

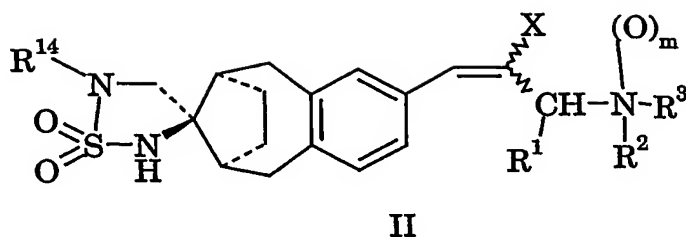
Z represents OR<sup>11</sup> or N(R<sup>5</sup>)R<sup>6</sup>;

R<sup>5</sup> and R<sup>6</sup> have the same definition as R<sup>2</sup> and R<sup>3</sup> in the embodiment in which R<sup>1</sup> is H or optionally substituted C<sub>1-4</sub>alkyl;

R<sup>14</sup> represents H or C<sub>1-6</sub>alkyl, C<sub>3-7</sub>cycloalkyl, C<sub>3-6</sub>cycloalkylC<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, phenyl or benzyl, any of which optionally bear up to 3 halogen substituents or one substituent selected from CN, NO<sub>2</sub>, OH, C<sub>1-4</sub>alkoxy, CO<sub>2</sub>H, C<sub>1-4</sub>alkoxycarbonyl, C<sub>2-6</sub>acyl, C<sub>2-6</sub>acyloxy, amino, C<sub>1-4</sub>alkylamino, di(C<sub>1-4</sub>alkyl)amino, C<sub>2-6</sub>acylamino, carbamoyl, C<sub>1-4</sub>alkylcarbamoyl and di(C<sub>1-4</sub>alkyl)carbamoyl; and  
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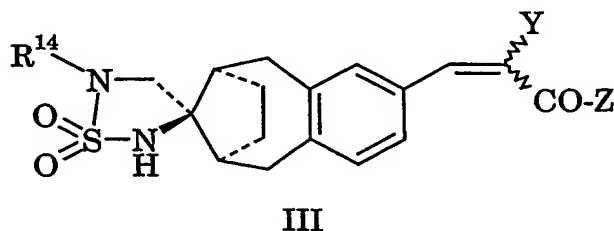
25 Ar represents phenyl or heteroaryl either of which optionally bears up to 3 substituents independently selected from halogen, CF<sub>3</sub>, NO<sub>2</sub>, CN, OCF<sub>3</sub>, C<sub>1-6</sub>alkyl and C<sub>1-6</sub>alkoxy;  
or a pharmaceutically acceptable salt thereof.

30 2. A compound according to claim 1 of formula II:



or a pharmaceutically acceptable salt thereof.

- 5 3. A compound according to claim 2 wherein  $R^1$  and  $R^2$  complete a heterocyclic ring of 5 or 6 atoms and  $R^3$  represents H,  $C_{1-6}$ alkyl,  $C_{2-6}$ acyl or benzyl.
4. A compound according to claim 2 wherein  $R^1$  is H or optionally substituted  $C_{1-4}$ alkyl and  $R^2$  and  $R^3$  complete a heterocyclic ring system.
- 10 5. A compound according to claim 4 wherein  $R^{14}$  is 2,2,2-trifluoroethyl, X is F, CN or methyl, and  $R^1$  is H.
- 15 6. A compound according to claim 4 wherein m is 1 and X and  $R^1$  are both H.
7. A compound according to claim 1 of formula III:



or a pharmaceutically acceptable salt thereof.

8. A compound according to claim 7 wherein Y represents F, CN or methyl and Z represents OH, C<sub>1-6</sub>alkoxy or N(R<sup>5</sup>)R<sup>6</sup>.
9. A compound according to claim 8 wherein R<sup>14</sup> represents 2,2,2-trifluoroethyl and Z represents ethoxy.
10. A pharmaceutical composition comprising a compound according to any previous claim and a pharmaceutical carrier.
11. A compound according to any of claims 1-9 for use in a method of treatment of the human body.
12. The use of a compound according to any of claims 1-9 in the manufacture of a medicament for treating or preventing Alzheimer's disease.
13. A method of treatment of a subject suffering from or prone to Alzheimer's disease comprising administering to that subject an effective amount of a compound according to any of claims 1-9.